



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/205,119

12/03/1998

CHARLES A. ELDERING

8887-3004

8185

27832

7590

09/08/2006

EXAMINER

LONSBERRY, HUNTER B

TECHNOLOGY, PATENTS AND LICENSING, INC./PRIME  
2003 SOUTH EASTON RD  
SUITE 208  
DOYLESTOWN, PA 18901

ART UNIT

PAPER NUMBER

2623

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/205,119

**Applicant(s)**

ELDERING ET AL.

**Examiner**

Hunter B. Lonsberry

**Art Unit**

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 82-116 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 82-116 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/20/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 11/2/05 have been fully considered but they are not persuasive.

Applicant argues that Alexander does not teach or suggest correlating a subscriber demographic characteristic with a demographic characteristic of a group if a sufficient correlation exists since the subject viewer in Alexander is not compared or assigned to a group. Further any relationship a subscriber has with a theme is determined based solely on a subscribers previous interactions with that theme (Pages 15-16).

Regarding applicant's argument, Alexander does disclose assigning users to a group by characterizing their preferences, age, marital status, political affiliations etc. Each of these characteristics have a group associated with it, for example married people vs. unmarried people are separate groups of people. Further this profile information is used as a basis of comparison with other profiles to determine user inferences in a particular subject, product, theme, movie, episode etc based on comparisons to similar view profiles (column 30, lines 18-37).

Applicants argue that Alexander teaches the application and/or use of predefined heuristic rules to infer. (Page 16).

The Examiner disagrees; see Alexander (column 29, line 31-column 30, line 36). Alexander does not teach the generation on the fly of any new rule, therefore the rules must be created (pre-defined) prior to the time they are applied.

Further:

<http://dictionary.reference.com/search?q=heuristic> defines a heuristic as:

*Of or relating to a usually speculative formulation serving as a guide in the investigation or solution of a problem: "The historian discovers the past by the judicious use of such a heuristic device as the 'ideal type'"*

The Examiner reiterates that Alexander does not teach a system or method in which a user enters any information regarding a user's marital status, whether they have children, age, or likely political affiliations. The profile program, as taught at column 30, lines 29-38, determines over time and with sufficient data, these characteristics (and the resultant groups to which the user would belong). Only the user themselves knows for sure their own age, marital status, children and likely political affiliations, any other determination is purely speculation on the part of Alexander's system. The Examiner reminds applicant of this point as first discussed in the Final Rejection of 1/29/04. Alexander must use a heuristic rule as it determines user characteristics based upon

the number of times a user interacts with an EPG, the Internet and other sources  
(column 29, line 31-column 30, line 16).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 82-116 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,177,931 to Alexander in view of U.S. Patent 5,446,919 to Wilkins.

Regarding claim 82, 91, 114, Alexander discloses a method for monitoring a subscribers interactions with targeted programming (the program being currently monitored, column 32, line 61-column 33, line 7, lines 27-43), the method comprising:

monitoring subscriber interactions with the targeted programming (column 32, line 61-column 33, line 7, lines 27-43);

retrieving information corresponding to the targeted programming (column 33, lines 27-43, this type of programming is utilized to determine which advertisements to display to the user within the EPG), wherein the information includes describes at least one viewer characteristic (column 30, lines 1-37)

applying one or more predefined heuristic rules associated with the subscriber interactions, wherein the heuristic rules relate one subscriber demographic characteristics to subscriber interactions (column 30, lines 1-37, the viewer profile program speculates on the user's age, marital status and has children in response to recording and interpreting subscriber interactions),

inferring at least one subscriber demographic characteristic of the subscriber based on the application of the heuristic rules (column 30, lines 1-37, the viewer profile program speculates on the user's age, marital status and has children in response to recording and interpreting subscriber interactions),

correlating at least one subscriber demographic with at least one demographic characteristic of at least one group (column 30, lines 38-44, the program compares the individual profile with view profiles of others to determine if a user will be interested in a particular product, subject or theme), and

associating the subscriber with the group if there is sufficient correlation between the at least one subscriber demographic and the at least one demographic characteristic of the group (column 30, lines 38-44, the program compares the individual profile with view profiles of others to determine if a user will be interested in a particular product, subject or theme).

Alexander fails to disclose retrieving information associated with the targeted programming which describes at least one demographic characteristic of a group associated with the targeted program.

In an analogous art, Wilkins discloses that a user watches a program segment 200, during transmission of the program, a STB retrieves a commercial selection signal that displays three different commercials based on user demographics (user income), users with lower incomes view a Hyundai commercial, Moderate incomes view a Ford commercial, and Upper incomes view a Mercedes commercial (column 11, lines 20-41, column 12, lines 31-44), thus providing commercial advertisements which are of most relevance to the user's income.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Alexander to utilize the demographics characteristics as taught by Wilkins in order to provide advertisements which are relevant to a user's purchasing power.

Regarding claims 83-84, Alexander discloses that the heuristic rules are probabilistic in nature and assign a probability of a user's demographic (column 29, lines 56-column 30, line 37, the rules characterize a user's interest and demographic characteristics).

Regarding claims 85, 100, Alexander discloses that the heuristic rules predict product interest characteristics about the subscriber and correlating the product interest characteristic with at least one demographic characteristic of the group (column 30, lines 29-44).

Regarding claims 86-87, 95, 97, and 101, Alexander discloses monitoring all user interactions with a TV including channel changes, volume changes record commands and associated times (column 28, lines 13-59).

Regarding claims 88 and 102, Alexander discloses that at least one subscriber demographic is based on interactions aggregated over multiple viewing sessions (column 29, lines 22-30, column 30, lines 29-37).

Regarding claims 89, 93-94, 104, 107-108, 111, 113, , Alexander discloses at least one subscriber demographic that does not identify specific subscriber interactions (column 30, lines 29-37, over time the profile program determines a user's marital status, age, sense of humor, has children, this takes place over time and not the result of specific interactions from one session).

Regarding claim 90, Alexander discloses that the user's EPG will monitor channel changes, and the programming displayed on the channel changed too, identification of advertisements on screen, volume changes, whether or not a user changed a channel or not and the time of the channel change (column 28, lines 13-59), this information is utilized to define trails about the user (column 29, lines 31-55, column 30, lines 17-37).



Regarding claims 92, 99, 103, 112, Wilkins is relied upon to teach subscriber demographics which are not obtained through statistical analysis of the subscriber interactions (column 8, lines 15-38, the database compiles subscriber credit information, and membership information to determine demographics about the user).

Regarding claim 97, Alexander discloses a method for monitoring a subscribers interactions with targeted programming (the program being currently monitored, column 32, line 61-column 33, line 7, lines 27-43), the method comprising:

monitoring subscriber interactions with the targeted programming (column 32, line 61-column 33, line 7, lines 27-43);

utilizing heuristic rules associated with the subscriber interactions, wherein the heuristic rules infer at least one subscriber demographic based on subscriber interactions (column 30, lines 1-37, the viewer profile program speculates on the user's age, marital status and has children), the at least one subscriber demographic is not directly observable from the subscriber interactions (column 30, lines 29-37, over time the profile program determines a user's marital status, age, sense of humor, has children, this takes place over time and not the result of specific interactions from one session),

correlating at least one subscriber demographic with at least one demographic characteristic of at least one group (column 30, lines 38-44, the program compares the individual profile with view profiles of others to determine if a user will be interested in a particular product, subject or theme), and

associating the subscriber with the group if there is sufficient correlation between the at least one subscriber demographic and the at least one demographic characteristic of the group (column 30, lines 38-44, the program compares the individual profile with view profiles of others to determine if a user will be interested in a particular product, subject or theme).

Alexander fails to disclose retrieving information associated with the targeted programming which describes at least one demographic characteristic of a group associated with the targeted program.

In an analogous art, Wilkins discloses that a user watches a program segment 200, during transmission of the program, a STB retrieves a commercial selection signal that displays three different commercials based on user demographics (user income), users with lower incomes view a Hyundai commercial, Moderate incomes view a Ford commercial, and Upper incomes view a Mercedes commercial (column 11, lines 20-41, column 12, lines 31-44), thus providing commercial advertisements which are of most relevance to the user's income.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Alexander to utilize the demographics characteristics as taught by Wilkins in order to provide advertisements which are relevant to a user's purchasing power.

Regarding claims 98, 106, 110, 116, Alexander discloses at least one subscriber demographic that does not identify specific subscriber interactions (column 30, lines 29-

Art Unit: 2623

37, over time the profile program determines a user's marital status, age, sense of humor, has children, this takes place over time and not the result of specific interactions from one session). As the user's demographics are presumed to be true, they are inferred based upon a user's behaviour.

Regarding claims 105, 109 and 115, Alexander discloses that users profiling data may be updated at regular intervals in order to characterize the user's demographics (column 29, lines 22-column 30, line 16).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 571-

Art Unit: 2623

272-7298. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HBL

  
HAITRAN  
PRIMARY EXAMINER